User Manual

Ascom a71 Alarm Transceiver and Ascom p71 Transceiver

2007-04-20/ Ver. A

Contents

1 Introduction 1
1.1 Abbreviations and Glossary 1
1.2 Ascom a71 and p71 Versions 1

2 Description 2
2.1 General Design 2
2.2 Chargers 5
2.2.1 Single Charger 5
2.2.2 RS232 Programming Device 5
2.2.3 PCR Charging Rack 5
2.3 Accessories 6

3 Safety Instructions 7

4 Basic Operation 8
4.1 Switch the Transceiver On/Off 8
4.2 Mute the Transceiver 8
4.3 Lock the Keys Manually 8
4.4 Charge the Battery 8

5 Alarm Functions 9
5.1 Push-button Alarms 9
5.2 Pull-cord Alarm 9
5.3 Man-down & No-movement Alarm 10
5.4 Acoustic Location Signal (ALS) 10
5.5 Location Function (IR or LF) 11
5.6 Special Location Function 11
5.7 External Alarm 11

6 Messaging 12
6.1 Messages List 12
6.1.1 Read a Stored Text Message 12
6.2 Basic Message Handling 12
6.2.1 Receive a Text Message 12
6.2.2 Receive a Message with Request for Answer 12
6.2.3 Delete a Message 12
6.3 Message Queue 13
6.4 Info Message 13
6.5 Configure the Soft Keys for Received Messages 13
6.6 Data Send 13
6.6.1 Data Send 13
6.6.2 Data Send with a Prefix 13

7 Navigate the Menu 14
7.1 Enter/Exit the Menu 14
7.2 Shortcut Keys 14
8 Menu Tree 15
8.1 Messages 15
8.2 Profiles 15
8.3 Services 15
8.4 Settings 16
9 Menu Operations 17
9.1 Messages 17
9.1.1 Message List 17
9.1.2 Info Messages List 17
9.1.3 Send Data 18
9.2 Profiles 18
9.2.1 Change Profile 18
9.3 Services 19
9.3.1 Activate a Service 19
9.4 Settings 19
9.4.1 Change the Volume 20
9.4.2 Increasing Volume On/Off 20
9.4.3 Vibrator On/Off 20
9.4.4 Message Reminder On/Off 20
9.4.5 Key Beep On/Off 20
9.4.6 Deactivate/Activate Man-down alarm 20
9.4.7 Deactivate/Activate No-movement alarm 20
9.4.8 Deactivate/Activate Pull-cord alarm 20
9.4.9 Set Alarm Data 20
9.4.10 Change the Message Text Size 21
9.4.11 Backlight On/Off 21
9.4.12 Change the Contrast 21
9.4.13 Turn Automatic Key Lock On/Off 21
9.4.14 View Shortcut Keys 21
9.4.15 Select Language 21
9.4.16 Group Numbers 22
9.4.17 Show Time and Date 22
9.4.18 Set Time Format 22
9.4.19 Set Date Format 22
9.4.20 Display System Information 22

9.5 System Test 23
9.5.1 Coverage Test 23
9.5.2 Location Test 23
9.5.3 Error Log 23
9.5.4 GUI Test 23
9.5.5 MD/NM Test 23

10 Operation Notice 24
10.1 Operation Condition 24

11 Maintenance 25
11.1 Atex/EX 25
11.2 Replace the Battery 25
11.2.1 Replacing battery in EX Version 25
11.3 Change the SIM Card 26
11.4 Fasten the Clip 26

12 Related Documents 27
Appendix A: Programming the Transceiver 29

1 Introduction

This document describes the Ascom a71 Alarm Transceiver and p71 Transceiver. The Ascom a71 Alarm Transceiver and p71 Transceiver included in the On Site Paging and Personal Security System are easy to use and designed to function in tough environments.

The transceivers are described in default programmed version but additional functions and factory settings are also included in the document, providing a full description of the functionality.

Note that the system may not supply all functions described in this document. For information about the system, please contact the supplier.

The following documents are recommended as a complement:

- *System Description, Personal Security System, TD 90677GB*
- *System Description, On Site Paging System, TD 91034GB*

1.1 Abbreviations and Glossary

ALS	Acoustic Location Signal. A ramped up signal that can be played after an alarm from the transceiver.
IR	Infra Red
LED	Light Emitting Diode
LF	Low Frequency
PCR	Portable Charging Rack
PDM	Portable Device Manager
SIM	Subscriber Identity Module
System 900	Generic term for telePROTECT, teleCOURIER and CTS 900 systems.

1.2 Ascom a71 and p71 Versions

The transceivers are available in two versions, basic and advanced. Intrinsically safe (ATEX/EX) versions are available as an option.

Functions	a71 basic	a71 advanced	p71 basic	p71 advanced
SIM card	Yes	Yes	Yes	Yes
Vibrator function	Yes	Yes	Yes	Yes
Messaging	Yes	Yes	Yes	Yes
Acknowledge	Yes	Yes	-	Yes
Group messaging	Yes	Yes	Yes	Yes
Data Send	Yes	Yes	-	Yes
Data with prefix	Yes	Yes	-	Yes
Availability information/Absence	Yes	Yes	Yes	Yes
Push-button alarm	Yes	Yes	-	-
Man-down & No-movement alarm	-	Yes	-	-
Pull-cord alarm	Yes	Yes	-	-
Acoustic Location Signal (ALS)	Yes	Yes	-	-
Location function*	-	Yes	-	-
Intrinsically safe (ATEX/EX)	-	Option	Option	-
** System dependent feature*				

001

Figure 1. Function overview of the transceivers

Alarms are transmitted on the UHF band 420-475 MHz. The code format is compatible with the System 900.

2 Description

This section describes the transceiver and available accessories.

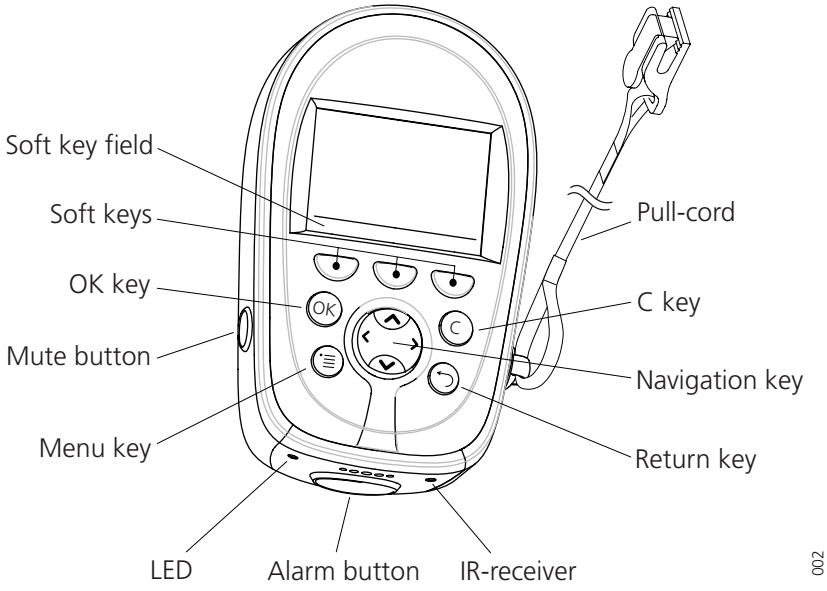

Figure 2. Overview of the transceiver

2.1 General Design

Display

The icons and text in the display shows the current status.

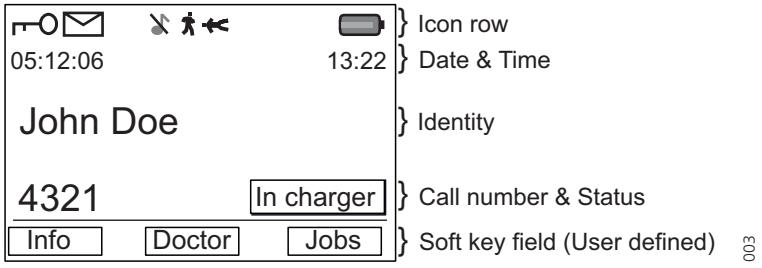

Figure 3. Example of a display configuration in stand-by mode.

The display can be divided into the following segments:

- **Icon row -** Shows information on active alarms, battery level.
- **Date & Time** - Shows the date and time.
- **Identity -** Shows the owner ID.
- **Call number -** Shows the call number.
- **Status -** Shows the status of the transceiver. For examples; In charger.
- **Soft key field -** Shows the user defined function of the three soft keys beneath the display.

Display Icons

The “Audio signal off” icon is shown when all alert signals, including ring signal, message tone, key beep etc. are turned off. High priority messages will however override this setting.

The “Battery” icon is always shown in the display in stand-by mode. When the level is low it is time to charge the battery.

The “New message” icon appears when a new message is received. The number on the right side of the icon shows the total number of unread messages. The symbol will remain until the message is read.

The “Unread message” icon is added in front of not read messages in the message list.

The “Read message” icon is added in front of read messages in the message list.

The "Response required" icon is added in front of messages that requires a response.

The "Response sent" icon is added in front of messages that has been responded to.

The “Key” icon shows that the keypad is locked.

The “No-movement alarm on” icon shows that the no-movement alarm is activated.

The “Man-down alarm on” icon shows that the man-down alarm is activated.

The “Pull-cord alarm on” icon shows that the pull-cord alarm is activated.

The "Error" icon appears when an error has occured. Service is needed.

Menu Icons

“Messages”, see 9.1 *Messages* on page 17 for more information.

“Profiles”, see 9.2 *Profiles* on page 18 for more information.

“Services”, see 9.3 *Services* on page 19 for more information.

“Settings”, see 9.4 *Settings* on page 19 for more information.

Buttons

The transceiver has two buttons, see figure 2 on page 2.

Alarm button, used to send alarms. The button can also be used for test alarm. The function of this button is configurable.

Mute button, used to silence the beep, vibrator and LED signals including the Acoustic Location Signal (ALS).

Keys

The transceiver has eight keys, see figure 2 on page 2.

Soft Keys, the three soft keys are located just beneath the display and the function of each soft key is shown by text in the display just above the keys. In stand-by mode the soft keys can be used for specific functions defined by the administrator.

Navigation key, , is used to control the movement of the cursor in the display.

OK is used to confirm choices in the menu.

C is used to delete messages and clear check boxes in the menu.

is used to step backwards when navigating in the menu tree.

is used to access/leave the menu.

Case

The case is made of durable PC/ABS plastic and is IP64 classified. The transceiver also fulfils IEC 60068-2-32 procedure 1, which makes it drop proof from one meter onto concrete. Ascom approves drops from 1.5 meters.

A transparent smoke coloured plastic item covers the IR receiver and the LED. A name label is located next to the clip.

Antenna

The antenna used for communicating with the fixed system is integrated in the transceiver. This makes the transceiver robust and easy to handle.

Clip, Hinge-Type

The clip on the back of the transceiver can be used to fasten the transceiver to a belt or similar. It is also possible to change the clip to a swivel-type clip.

Battery

The battery is a rechargeable Li-Ion battery.

Note: The a71 EX Alarm Transceiver and the p71 EX Transceiver must be used with special EX approved batteries.

SIM Card

All personal settings in the transceiver are programmed and stored in the SIM card. The SIM card can easily be moved to another transceiver. By this it is easy to keep personal settings, such as identity and alert signal. This can be handy in case of break down or when changing operation environment and switching transceiver.

Pull-cord (Option)

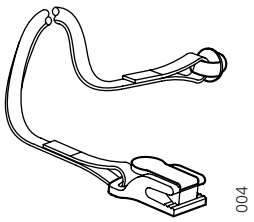

Figure 4. Pull-cord

The pull-cord is made of a ABS plastic attachment connected to a canvas ribbon. The end of the ribbon has a clip which must be safely attached, for example, to the clothes. The pull-cord is also used as a security string, which prevents the transceiver to fall to the ground.

The transceiver can be used without the pull-cord option. Remove the pull-cord and plug the hole with the provided ABS lid.

2.2 Chargers

2.2.1 Single Charger

The single charger is a separate unit used for charging the transceiver. Connect the single charger by pushing it under the clip. The single charger is connected to a power supply which has four exchangeable plug-in contacts which fit into an ordinary wall socket in many countries.

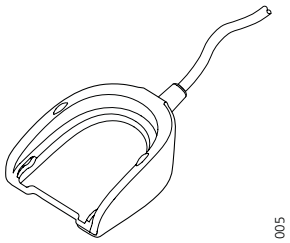

Figure 5. Single charger for the transceiver

For more information about the single charger, see *Data Sheet, Single Charger, TD 92353GB*.

Note: When charging an EX-version the single charger must be marked with .

2.2.2 RS232 Programming Device

Similar to the single charger in design, the RS232 programming device is used to connect the transceiver to a computer in order to upgrade the firmware and edit parameters. For more information see, Appendix A: *Programming the Transceiver* on page 29.

2.2.3 PCR Charging Rack

The wall mounted PCR Charging Rack (PCR) is used for charging the transceivers. The PCR is a modular system that consists of a master module (PCR-M), extension modules (PCR-E) and power supplies. Each PCR module has six charging slots.

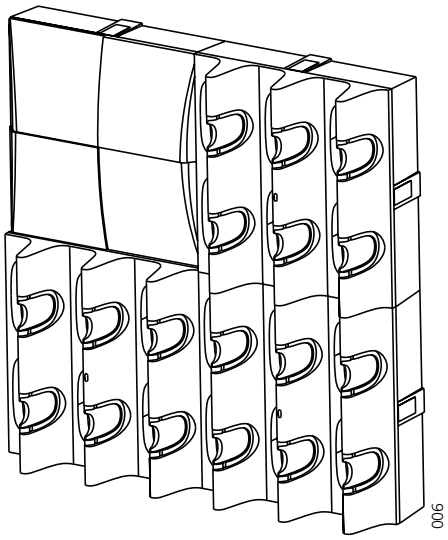

Figure 6. PCR with power supply, one PCR-M and two PCR-E

One PCR-M can support up to 20 PCR-E, which gives a charging possibility of 126 transceivers. A power supply feeds up to three Charging Rack modules (one PCR-M and two PCR-E), which results in seven power supplies for the above example.

Transceivers with a pull-cord/security string can be charged in the PCR Charging Rack without removing the pull-cord.

For further information about the PCR refer to its *Data Sheet, Portable Charging Rack, TD 92355GB* and *Installation Manual, PCR Charging Rack, TD 92356GB*.

Note: When charging an EX-version, the PCR Charging Rack must be marked with CR2.

2.3 Accessories

Belt Clip, Swivel Type

The ordinary belt clip can be replaced by a special swivel type, adapted to firmly place the transceiver in the belt.

Leather Case

As accessory, there is a leather case especially designed for the transceiver used to increase the protection of wear and tear. It is possible to use the transceiver while it is placed in the case. The clip of the transceiver is not necessary to remove.

Name Label Kit

For the transceiver, a name label kit can be ordered. The name label is possible to use for own means of identification.

3 Safety Instructions

For safe and efficient operation of the transceiver, observe the guidelines given in this manual and all necessary safety precautions when using the transceiver. Follow the operating instructions and adhere to all warnings and safety precautions located on the product, the Quick Reference Guide and this User Manual.

Charging

This product shall only be used with the following batteries:

P/N: 660089 Battery, 660161 Ex Battery

Single chargers shall only be connected with power adapters supplied by the manufacturer.

Available power adapter:
P/N: 660109 Power supply unit AC/5V DC/1A

Warranty notification

Do not disassemble the transceiver. Disassembling the handset voids the warranty. The a71/p71 alarm transceiver consists of no consumer serviceable components. Service should be performed by Authorized Service centre only.

Modifications

Changes or modifications to the equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC compliance statements

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Information to user

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

4 Basic Operation

Note: The transceiver may have functions other than described, depending on the pre-programmed parameters.

4.1 Switch the Transceiver On/Off

To switch the transceiver on:

1 Press and hold (OK).

2 Press "Yes" soft key.

To switch the transceiver off:

1 Press and hold (↩).

2 Press "Yes" soft key.

4.2 Mute the Transceiver

1 Press and hold the "Mute" button. is shown in the display.

4.3 Lock the Keys Manually

1 In stand-by mode, shortly press (C).

2 Press "Yes" soft key.

To unlock the keypad:

1 Shortly press (C).

2 Press "Yes" soft key.

4.4 Charge the Battery

Charging is done in a single charger or a wall mounted charging rack. It is recommended that the transceiver is charged daily.

Note: Charge the battery for at least two hours before it is used the first time.

A flashing orange LED indicates charging. A green steady LED and a filled icon shows a fully charged battery. It takes approximately two hours to charge the battery. An empty battery icon in the display and a warning beep signal played once every minute together with a fast flashing red LED indicates an empty battery. Put the transceiver into the charger to load the battery.

To replace the battery, see 11.2 *Replace the Battery* on page 25.

Note: While charging, Man-down & No-movement alarms are automatically deactivated. The Location Function (IR and LF) is also deactivated. (If a push-button alarm is sent, the last stored location before charging the transceiver, is sent).

5 Alarm Functions

To secure a safe transmission of an alarm, every alarm is sent in two sequences. The number of times to resend an alarm in each sequence is configurable with parameters and is done in the PDM.

A beep/vibrator/LED signal can confirm that an alarm has been sent. These feedback signals of a sent alarm are all configurable.

Common Alarm Configurations

The following parameters are common for the Test alarm, Personal alarm, Man-down & No-movement and Pull-cord alarm types.

- Number of alarm transmissions per sequence
- Beep feedback
- LED feedback
- Vibrator feedback

5.1 Push-button Alarms

Test Alarm

Press and hold the "Alarm" push-button until "Test Alarm" is displayed. Depending on set parameters, a beep is heard, the green LED flashes once and the vibrator stirs.

Note: Send a test alarm every day to test the transceiver and system.

Personal Alarm

Press the "Alarm" push-button twice or more. "Personal Alarm" is displayed. Depending on set parameters, a beep is heard, the green LED flashes once and the vibrator stirs.

5.2 Pull-cord Alarm

An alarm is sent when the pull-cord is pulled off the transceiver. Depending on set parameters, a beep/vibrator/LED signal confirms that the alarm has been sent.

The pull-cord must be attached more than 5 seconds to generate an alarm.

Note: Make sure that the clip of the pull-cord is safely attached to the clothes. To make a test, remove the battery of the transceiver, pull the transceiver and make sure that the pull-cord releases first.

5.3 Man-down & No-movement Alarm

Man-down alarm: The transceiver is tilted more than 55° for a preset time (default 7 seconds), for example, when falling.

No-movement alarm: Movement is not detected during a preset time (default 30 seconds).

Before the alarm is sent, the transceiver enters a warning phase called Man-down/No-movement Warning (MDW), with a repeated warning tone (default 7 seconds). The beep signal always starts with a pair of low volume beeps and then continues with high volume beeps, and is alternating with the vibrator.

Press any button during this warning phase to prevent the alarm from being sent.

If no button is pressed an alarm is sent. Depending on set parameters, a beep/vibrator/LED signal confirms that the alarm has been sent.

Extra Delay

If the parameter "Extra delay" is enabled, the detection of Man-down & No-movement alarm can be disabled for a configurable time (default 10 minutes). When the warning signal sounds, press the "Mute" button. Press "Yes" to activate the extra delay.

Configuration of Man-down & No-movement Alarm

The following parameters are configurable:

- Time of Man-down detection phase (time of a tilted state)
- Time of No-movement detection phase (time of a non-moving state)
- Time of Man-down/No-movement Warning (MDW) phase
- Extra delay activation
- Extra delay time

5.4 Acoustic Location Signal (ALS)

Depending on set parameters, the ramped up ALS is played after an alarm. The signal is always ramped from the lowest volume to the highest. Press the "Mute" button to turn the ALS off.

Depending on the PDM settings, it is possible to make the user enter a password when turning the ALS off. The password is the same as the login password.

ALS is configurable for Man-down & No-movement alarm, Push-button alarm and Pull-cord alarm.

5.5 Location Function (IR or LF)

The location of the transceiver, received via either infrared light (IR) or low frequency transmission (LF), is automatically sent along with an alarm.

If both IR and LF are enabled, the transceiver first handles IR and then LF. If a location is detected, the location function is put to sleep until the next scan interval, which is defined by a parameter. Depending on set parameters, a beep signal and/or a flashing green LED indicates that a location (a new or the same) has been received.

Note: A transceiver with an IR receiver must never be covered, see figure 7.

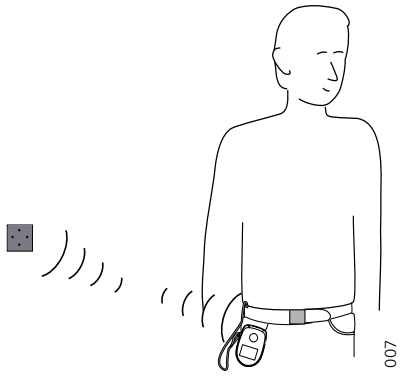

Figure 7. IR-function of transceiver.

Configuration of Location Function

The following parameters are configurable:

- Reading of location code interval
- Beep activation when receiving the location
- LED activation when receiving the location

5.6 Special Location Function

If the fixed locators are set to send a "special location code", the portable automatically can send an alarm directly after it has received the code.

5.7 External Alarm

The portable can send either alarm or data when triggered by an incoming external alarm signal. A Single Charger has to be modified for this purpose, see *Configuration Manual, Ascom a71 Alarm Transceiver and p71 Transceiver, TD 92439GB*.

6 Messaging

6.1 Messages List

The twenty last received messages are stored in a message list.

6.1.1 Read a Stored Text Message

Open the message list by pressing ^ or from the menu. Navigate the list using ^ v. The selected message is highlighted. Press (OK) to read the message. Skip between messages by using < >.

If the clock and date function is set, the time when the message was received can be seen. The time stamp is changed to a date stamp the following day.

6.2 Basic Message Handling

6.2.1 Receive a Text Message

The flashing LED, accompanied by a message tone and/or a vibrating transceiver, indicates a message. The message tone can be silenced by a press on the "Mute" button. The message tone will break through silent mode if the message is urgent. The message is shown in the display.

An unread message is indicated with ✉ in the display. In the message list, unread messages are marked ●. By pressing any key (not alarm) the received message is marked as read ✓. When all unread messages are read, the ✉ disappears.

6.2.2 Receive a Message with Request for Answer

A message with request for answer is indicated and viewed the same way as an ordinary message, see 6.2.1 *Receive a Text Message* on page 12. Use the soft keys to do a positive or negative acknowledgement.

Accept/Reject a Message

Press the soft key “Accept” or “Reject”. An acknowledged message is shown by the text “Accepted” or “Rejected”.

6.2.3 Delete a Message

Delete a Received Message

Press (C) when the message is displayed. The question “Delete message?“ is shown; press “Yes”.

Delete a Stored Text Message

Open the message list by pressing ^, or from the menu. Navigate the list using ^ v. The selected message is highlighted. Press (C). The question “Delete selected message?” is shown. Press “Yes”.

6.3 Message Queue

If a new message is received while another message is read the new message will replace the old message in the display. The old message will be placed in the message list.

6.4 Info Message

An info message is shown by the I icon in the display. Open the info message from the menu. An Info message contains information that is updated frequently, such as measurements in a production process, exchange rates, or stock market notations.

The transceiver can receive one info message per call number i.e. altogether six. When an info message is displayed, the I symbol appears. The info messages are handled as a message, see 6.2 *Basic Message Handling* on page 12 for more information.

6.5 Configure the Soft Keys for Received Messages

For every beep code (0-7) it is possible to configure the soft keys in the PDM. The following can be done;

- define which soft keys are shown
- define the text on the soft keys
- define the action of the soft keys

Note: The possible actions are data send, data send with prefix, accept and reject.

6.6 Data Send

It is possible to send data from the transceiver by pressing a pre-programmed soft key or selecting a service. Data send can be used for opening a door, starting/stopping a machine etc. The configuration is done from the PDM.

6.6.1 Data Send

The data send function is accessed from the messages menu. The data can be predefined when programming the soft key or service.

6.6.2 Data Send with a Prefix

Data send with a prefix is sent from the transceiver by pressing a pre-programmed soft key or selecting a service and then entering data.

7 Navigate the Menu

The choices in the main menu is displayed graphically with symbols, while the alternatives in the submenus are displayed as a list.

7.1 Enter/Exit the Menu

1 Enter the menu by pressing .

2 Navigate in the menu using .

3 Leave any menu screen by a single press on or press to return to idle mode.

The three soft keys below the display are used for choices in the menu. The function of each soft key is explained by text in the soft key field in the display. Examples of functions are; Save, Delete all, Yes, No etc.

The headline shows the selected icon, the icon itself is highlighted when selected.

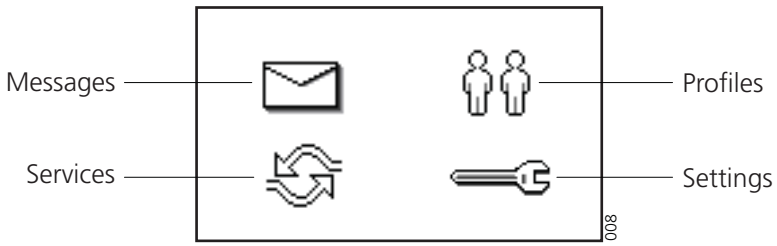

Figure 8. Menu icons

7.2 Shortcut Keys

In stand-by mode it is possible to assign the keys different functions using the PDM. To check which function that is assigned to the shortcut keys, see 9.4.14 *View Shortcut Keys* on page 21.

8 Menu Tree

8.1 Messages

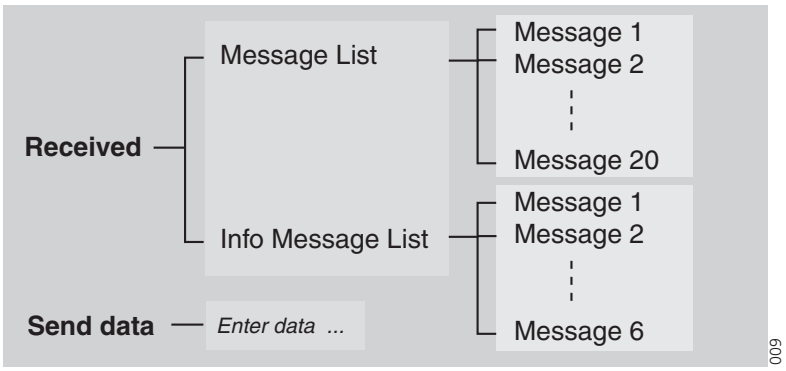

Figure 9. Messages tree

8.2 Profiles

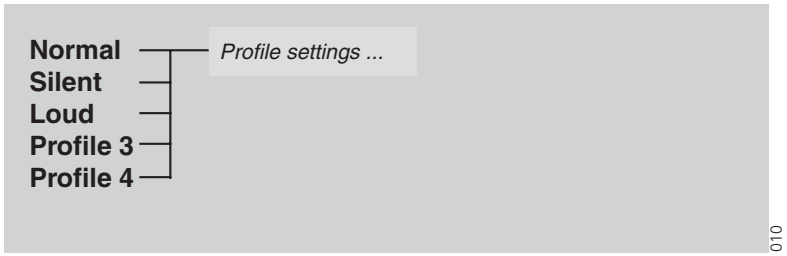

Figure 10. Profiles tree

8.3 Services

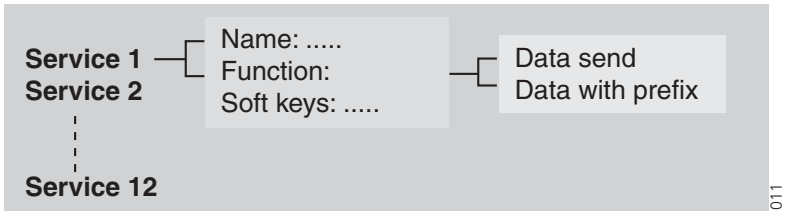

Figure 11. Services tree

8.4 Settings

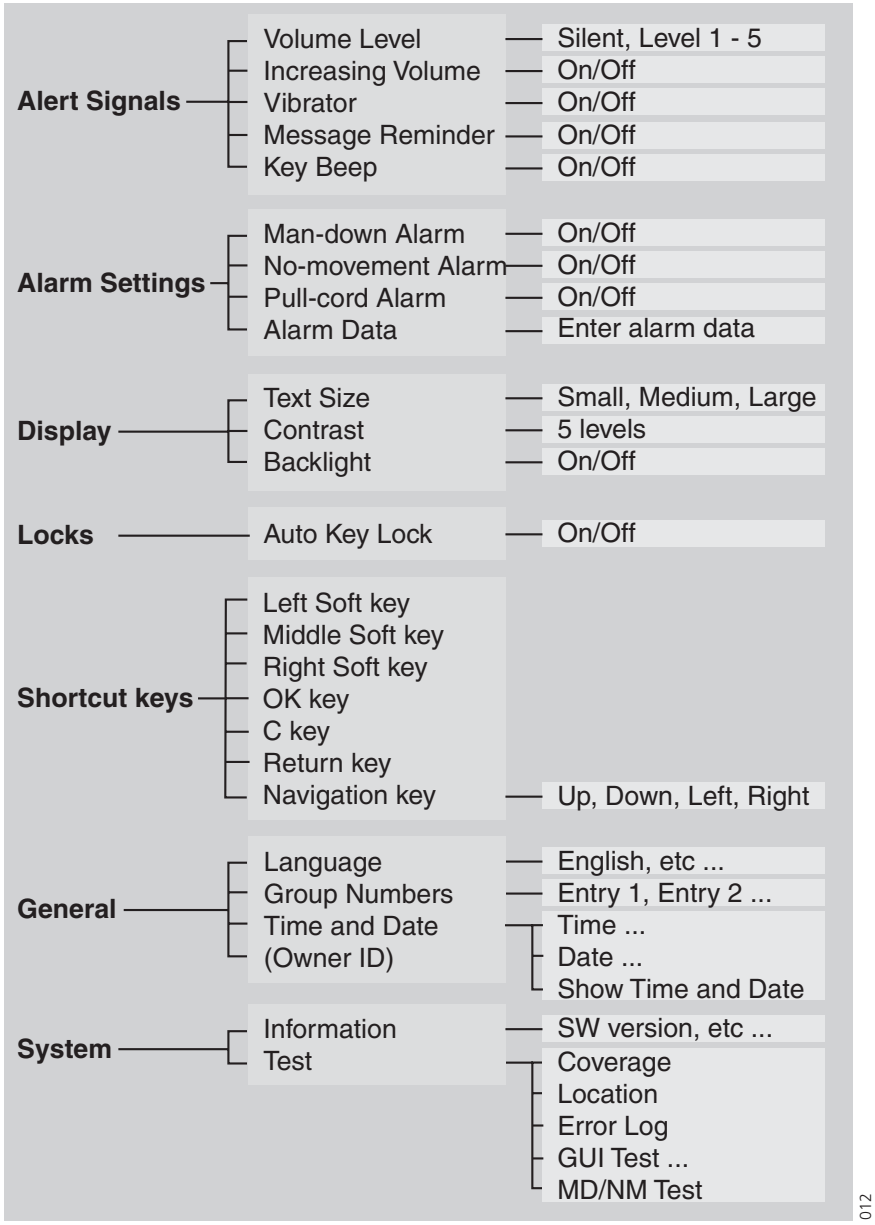

Figure 12. Settings tree

9 Menu Operations

A parameter setting in the SIM card determines if changes that are made from the menu is saved on the SIM card. If changes are not saved on SIM, they will be discarded when the transceiver is restarted.

9.1 Messages

Here are all received messages and info messages listed.

1 Enter the menu by pressing ≡.

2 Select "Messages" and press OK.

9.1.1 Message List

To enter the received messages list:

1 Select "Received" and press OK.

2 Select "Message List" and press OK.

Navigate the message list using ∧ ∨. All messages are either marked as read or unread.

Read a Message

1 Press OK. The message is displayed and the date and time it was received is shown. Skip between messages by using < >.

2 Press ↩ to return to the message list.

Delete a Message

1 Press C; the question "Delete message?" will appear.

2 Press "Yes". The handset will automatically return to the message list.

Delete all Messages

1 Press "Delete all" from the message list. The question "Delete all messages?" will appear.

2 Press "Yes" ("No" will return to the message list); "All messages deleted" is shown and after one second the transceiver will return to stand-by mode.

9.1.2 Info Messages List

The info message list is handled the same way as the message list. To enter the info messages list:

1 Select "Received" and press OK.

2 Select "Info Message List" and press OK.

Navigate the info message list using ∧ ∨. All info messages are either marked as read or unread.

9.1.3 Send Data

The data send function can be used for opening a door, starting/stopping a machine etc.

1 Press ☰.

2 Select "Messages".

3 Select "Send Data".

4 Use ∧ ∨ 〈 〉 to mark a digit in the virtual digit pad, press OK to select the digit.
- To insert a digit in the middle of the text string, press "Edit", use 〈 〉 to select where to insert the digit.
- Press "Insert" and insert the digits.
- To remove previous digit, press C.

5 Enter data and press "Send".

9.2 Profiles

It is possible to for the user to define up to five different profiles in the transceiver. Three profiles are preset at delivery; Normal, Silent and Loud.

1 Enter the menu by pressing ☰.

2 Select "Profiles" and press OK.

3 Navigate the Profiles list using ∧ ∨.

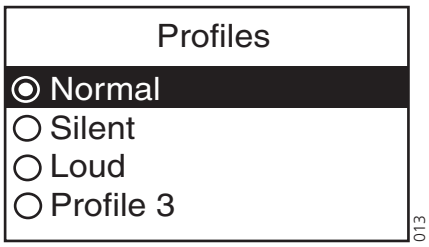

Figure 13. Profiles list

The profiles are configured in the PDM and can, for example, consist of different ring signals and volumes. Another example is when several users are sharing the same transceiver. Each user can then define their own settings, for example; type of ring signal, volume, soft key settings etc.

9.2.1 Change Profile

To change profile:

1 Select "Profiles" and press OK. A list with all profiles is shown.

2 Select the profile with ∧ ∨.

3 Press OK. The name of the marked profile is shown. The transceiver will automatically return to the profiles list.

A soft key can be programmed to change profiles, see *Configuration Manual* for more information.

9.3 Services

Twelve different services can be defined in the transceiver. The services are configured in the PDM, for more information, see Appendix A: *Programming the Transceiver* on page 29.

1 Enter the menu by pressing .

2 Select "Services" and press , a list with all created services is shown.

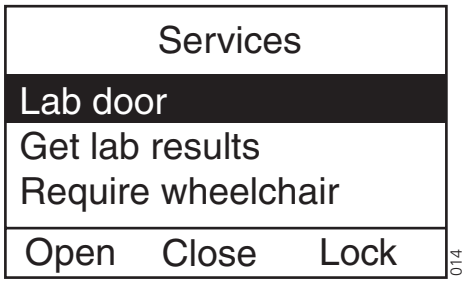

Figure 14. Services list

9.3.1 Activate a Service

1 Select the desired service in the service list using .

2 Press or soft key; to activate the service. If data is sent, the text "Sending" is shown. The transceiver will automatically return to the list and the selected service is marked.

9.4 Settings

It is possible for the user to change the settings. The alternatives are; Alert signals, Alarm settings, Display, Locks, Shortcut keys, General and System.

1 Enter menu by pressing .

2 Select "Settings" and press , a list with the settings options is shown.

3 Use to navigate the Settings menu.

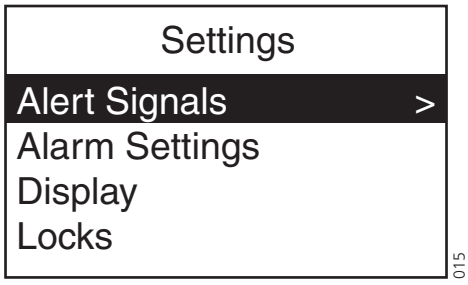

Figure 15. Settings menu

- *Alert Signals*; change the settings for all audible signals and the vibrator.
- *Alarm Settings;* turn the alarms on/off.
- *Display*; change the text size and contrast, turn backlight on/off.
- *Locks;* select if the keys are automatically locked.
- *Shortcut Keys*; view which function that is assigned to each shortcut key.
- *General;* change the following settings: Language, Group Numbers, Time and Date.
- *System;* view information about the system and access test functions.

9.4.1 Change the Volume

1 Select "Alert Signals" and press (OK).

2 Select "Volume Level" and press (OK). Select the desired volume level by using < >. There are six available alternatives; Silent and level 1 to 5.

3 Activate the choice by pressing "Save" or (OK). The transceiver will automatically return to the Alert Signals list.

9.4.2 Increasing Volume On/Off

1 Select "Alert Signals" and press (OK).

2 Select "Increasing Volume" and press (OK); the *Increasing Volume* checkbox is selected/cleared.

9.4.3 Vibrator On/Off

1 Select "Alert Signals" and press (OK).

2 Select "Vibrator" and press (OK); the *Vibrator* checkbox is selected/cleared.

9.4.4 Message Reminder On/Off

1 Select "Alert Signals" and press (OK).

2 Select "Message reminder" and press (OK); the *Message reminder* checkbox is selected/cleared.

9.4.5 Key Beep On/Off

1 Select "Alert Signals" and press (OK).

2 Select "Key Beep" and press (OK); the *Key Beep* checkbox is selected/cleared.

9.4.6 Deactivate/Activate Man-down alarm

1 Select "Alarm Setting" and press (OK).

2 Select "Man-down alarm" and press (OK); the *Man-down alarm* checkbox is selected/cleared.

9.4.7 Deactivate/Activate No-movement alarm

1 Select "Alarm Setting" and press (OK).

2 Select "No-movement alarm" and press (OK); the *No-movement alarm* checkbox is selected/cleared.

9.4.8 Deactivate/Activate Pull-cord alarm

1 Select "Alarm Setting" and press (OK).

2 Select "Pull-cord alarm" and press (OK); the *Pull-cord alarm* checkbox is selected/cleared.

9.4.9 Set Alarm Data

Alarm data is a string of up to 15 characters (digits) which is sent together with the alarm.

1 Select "Alarm Setting" and press (OK).

2 Select “Alarm Data” and press (OK).

3 Use ^ v < > to mark a digit in the virtual number pad, press (OK) to select the digit.

- To insert a digit in the middle of the text string, press "Edit", use < > to select where to insert the digit.
- Press "Insert" and insert the digit.
- To remove previous digit, press (C).

4 Press "Save" and "Yes" to save the Alarm Data string.

9.4.10 Change the Message Text Size

1 Select “Display” and press (OK).

2 Select “Text Size” and press (OK).

3 Choose between Large Size, Medium Size and Small Size. Press (OK).

9.4.11 Backlight On/Off

1 Select “Display” and press (OK).

2 Select “Backlight” and press (OK); the *Backlight* checkbox is selected/cleared.

9.4.12 Change the Contrast

1 Select “Display” and press (OK).

2 Select “Contrast” and press (OK).

3 Select the desired contrast by using < > then press “Save” or (OK).

9.4.13 Turn Automatic Key Lock On/Off

1 Select “Locks” and press (OK).

2 Select “Auto Key Lock” and press (OK); the *Auto key lock* checkbox is selected/cleared.

In stand-by mode a locked transceiver is shown by in the display.

9.4.14 View Shortcut Keys

The keys can be assigned different functions in the PDM. To check which function that is assigned to the shortcut keys:

1 Select “Shortcut keys” and press (OK).

2 Select a key and press (OK). Information about the assigned function is displayed.

9.4.15 Select Language

1 Select “General” and press (OK).

2 Select “Language” and press (OK).

3 Select the desired language using ^ v.

4 Press (OK). The language is shown.

9.4.16 Group Numbers

Group numbers makes it possible to send a message to multiple handsets. The group numbers are defined in the PDM. To activate group number, do the following:

1 Select "General" and press (OK).

2 Select "Group Numbers" and press (OK).

3 Select the group number using ^ v.

4 Press (OK); the selected group number checkbox is selected/cleared.

9.4.17 Show Time and Date

Depending on system setting, this function is available.

1 Select "General" and press (OK).

2 Select "Show Time and Date" and Press (OK). The *Show Time and Date* checkbox is selected/cleared.

9.4.18 Set Time Format

1 Select "General" and press (OK).

2 Select "Time and Date" and press (OK).

3 Select "Time" and press (OK).

4 Scroll to preferred Time format using ^ v.

5 Press (OK).

9.4.19 Set Date Format

1 Select "General" and press (OK).

2 Select "Time and Date" and press (OK).

3 Select "Date" and press (OK).

4 Scroll to preferred Date format using ^ v.

5 Press (OK).

9.4.20 Display System Information

1 Select "System" and press (OK).

2 Select "Information" and press (OK), information about hardware ID and software versions etc. is displayed.

9.5 System Test

System test menu is activated from the PDM.

1 Select "Settings" and press (OK).

2 Select "System" and press (OK).

3 Select "Test" and press (OK).

9.5.1 Coverage Test

To display the RSSI value:

1 Select "Coverage" and press (OK).

2 The RSSI should typically have a value above 100 to ensure sufficient coverage.

9.5.2 Location Test

To display the current (latest received) location:

1 Select "Location" and press (OK).

9.5.3 Error Log

To view the error log:

1 Select "Error Log" and press (OK), a list of recent system errors (if any) is displayed.

9.5.4 GUI Test

To test features such as LEDs, screen, backlight, vibrator, and beeps:

1 Select "GUI Test" and press (OK).

2 Select the feature to test and press (OK).

9.5.5 MD/NM Test

To test Man-down alarm and No-movement alarm:

1 Select "MD/NM Test" and press (OK).

10 Operation Notice

10.1 Operation Condition

Transceiver

Only use the transceiver in temperatures from -10 ^{O} C to +55 ^{O}C. Avoid exposing in direct sunlight and other heat sources.

Protect the transceiver from aggressive liquids and vapours. Keep the transceiver away from strong electromagnetic fields and explosive environments.

Battery

Do not immerse in water or throw into fire. Use the single charger or wall mounted charging rack for charging.

Note: When charging an EX-version the Single Charger must be marked with and the Charging Rack must be marked with CR2.

IMPORTANT: Charging of an EX-version is not permitted in a restricted area.

11 Maintenance

Use only original accessories. Installation and repairs should be done by authorised personnel only. Keep the recharging contacts on the transceiver away from metallic and greasy objects.

11.1 Atex/EX

Battery

In combination with EX-versions use approved battery types only. See EC Type Examination Certificate Sira 05ATEX2310 and following supplements.

The documents mentioned above and the EC Declaration of Conformity can be found at http://www.ascom.com/ws/products_ws.htm and www.IECEX.com

11.2 Replace the Battery

The plastic plate at the back of the transceiver is used to lock/unlock the battery lid.

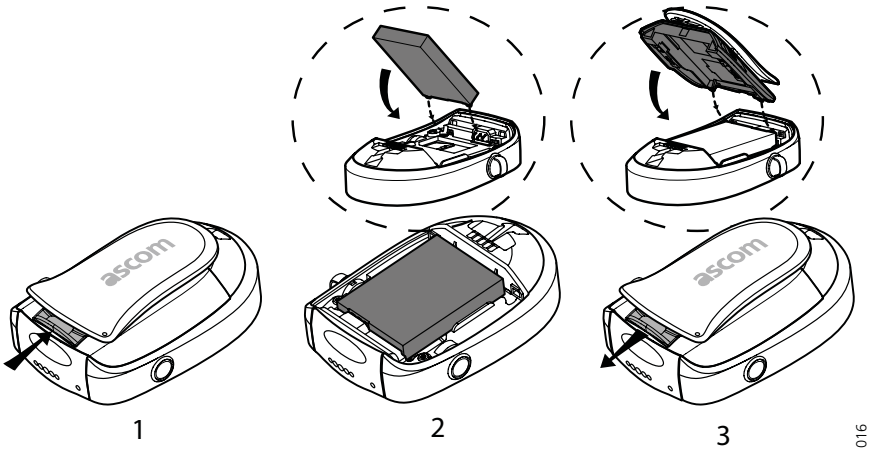

Figure 16. Battery replacement.

1 Push the plate to release the battery lid, see (1). Remove the lid and the battery.

2 Insert the new battery into the battery compartment (2).

3 Fasten the battery lid and secure it by pulling the plate (3).

11.2.1 Replacing battery in EX Version

The battery is fastened by a screw that requires a special tool; *Battery pack opener for ATEX*. To replace the battery:

1 Turn the screw to horizontal position.

2 Remove the battery lid and the battery.

3 Insert the new battery into the battery compartment, see (2) in figure 16 on page 25.

4 Before attaching the battery lid, turn the screws to horizontal position.

5 Attach the battery lid and turn the screws to a vertical position.

Note: Removing an EX-battery is not permitted in a restricted area.

11.3 Change the SIM Card

Note: It is recommended that the SIM card is changed in an environment without static electricity.

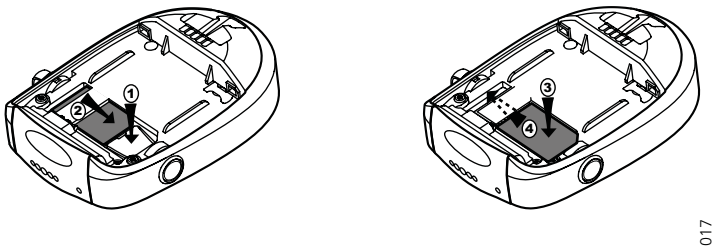

Figure 17. Removal and replacement of the SIM card.

1 Remove the battery, see 11.2 *Replace the Battery* on page 25. The SIM card is placed under the battery unit in a hatch.

2 Press down the flexible stop (1) and move the SIM card back as far as possible (2). Be sure that the SIM card is entirely out of the hatch before removing it. The easiest way to ensure this is to turn the transceiver upside down and let the SIM card fall out in the hand.

3 To insert the SIM card do the following: Put down the SIM card flat on the flexible stop (3) and push it carefully into the hatch (4).

Note: Be careful not to bend the SIM card.

11.4 Fasten the Clip

The clip has a special release function to prevent it from breaking when strained. When the clip is released and becomes slack, just snap it back with a hard press.

Note: This is also how a hinge-type clip is exchanged by a swivel-type clip.

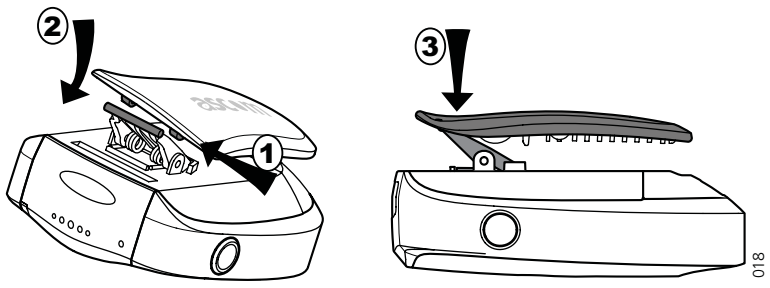

Figure 18. How to restore the clip.

If the clip has fallen entirely off its fastening, perform the following:

1 Put the axle in the closed hinge on the clip (1).

2 Push the axle until it snaps into the open hinge in the clip (2).

3 Press firmly on the clip until it snaps into place.

12 Related Documents

Installation and Operation Manual, Portable Device Manager, Windows version	TD 92325GB
Quick Reference Guide, a71 Alarm Transceiver and p71 Transceiver	TD 92418GB
System Description, Personal Security System	TD 90677GB
System Description, On Site Paging System	TD 91034GB
Configuration Manual, Ascom a71 Alarm Transceiver and p71 Transceiver	TD 92439GB
Installation Manual, PCR Charging Rack	TD 92356GB
Data Sheet, Portable Charging Rack	TD 92355GB
Data Sheet, Single Charger	TD 92353GB

Document History

For details, see change bars in the document.

Version	Date	Description
A	2007-04-20	First Released version

Appendix A: Programming the Transceiver

The transceiver is programmed using the Portable Device Manager (PDM) software PDM-SB. To program the transceiver do as below:

1 Connect the RS232 Programming Adapter to the computer.

2 The computer COM port corresponding to the RS232 Programming Adapter and the COM port settings for the PDM software must match. The PDM software uses default COM port 1, which can be changed, see *Installation and Operation Manual, Portable Device Manager, TD 92325GB.*

Note: If the software upgrade interrupted, for example if the cable is removed, the transceiver turns to download mode. When the transceiver is connected again, the *New portable connected* window appears. Select "Edit but don't save" > "OK".

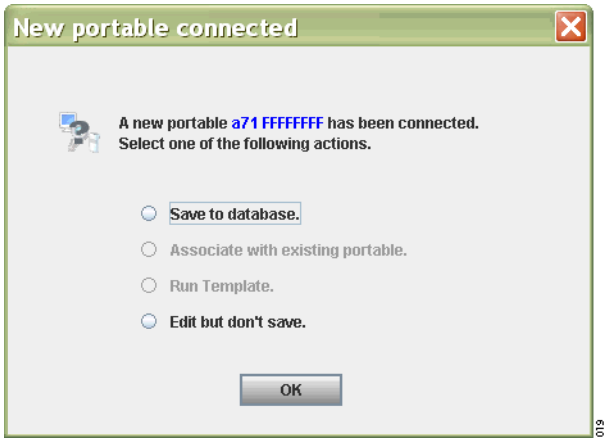

Figure 19. Connect new portable

The portable is added as an "unknown" entry in the PDM.

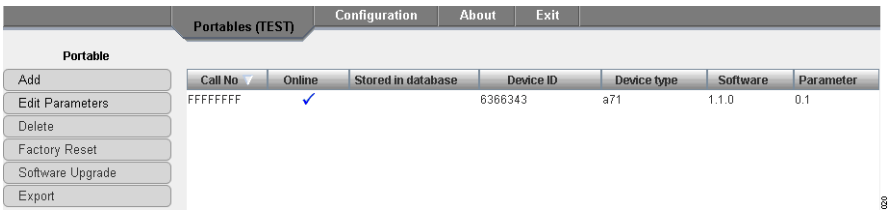

Figure 20. Unknown portable

Repeat the software upgrade for this unit again. The software upgrade is successfully performed when the Call No. of the portable changes from <unknown> to its real Call No. and gets online.

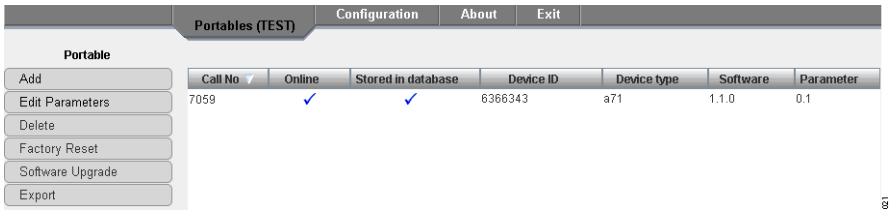

Figure 21. New portable added

Editing Parameters

When delivered, the transceiver parameters is pre-programmed. If any settings should be changed, the PDM can be used to edit the parameters. For instructions on how to edit parameters, see *Configuration Manual, Ascom a71 Alarm Transceiver and p71 Transceiver, TD 92439GB*.

Note: If the transceiver is ordered without customer programming, the Call number has to be set before editing other parameters.

Upgrading the Firmware

Follow the instructions in *Installation and Operation Manual, Portable Device Manager, TD 92325GB*.